

In the Claims:

- 1 1. (Original) A sensor transponder (1) with a facility for
2 transmitting measurement data from a tyre (9) to a
3 receiving facility and at least one acceleration sensor,
4 characterised in that the sensor transponder (1) is fitted
5 on an inner side of the running surface (2) of the
6 tyre (9).

- 1 2. (Original) A sensor transponder (1) according to claim 1,
2 characterised in that as a receiving facility, a receiving
3 antenna is fitted, which is preferably arranged in a
4 vehicle.

- 1 3. (Original) A sensor transponder (1) according to claim 2,
2 characterised in that the receiving antenna is also
3 designed as a transmitting antenna.

Claims 4 to 7 (Canceled).

- 1 8. (Original) A procedure for calculating a tyre contact
2 length (6), whereby a sensor transponder (1) is fitted with
3 at least one acceleration sensor arranged on the inner side
4 of a running surface (2) of a tyre (9), the signals from
5 the acceleration sensor are compared with threshold values

6 and are then integrated, and the tyre contact length (6) is
7 calculated independently of the velocity using quotient
8 formation.

1 9. (Original) A procedure according to claim 8, characterised
2 in that the tyre contact area (tread) is calculated from
3 the tyre contact length (6) using tyre-specific parameters.

1 10. (Original) A procedure according to claim 9, characterised
2 in that the wheel load is calculated using the tyre contact
3 area and the tyre pressure.

[REMARKS FOLLOW ON NEXT PAGE]